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Abstract of the Disclosure

A gain unit scales a code vector Ci output from a configuration variable code book by a gain g after the positions of non-zero samples are controlled according to an index and transmission parameter p. A linear prediction synthesis filter input the multiplication result, and outputs a regenerated signal gACi. A subtracter outputs an error signal E by subtracting the regenerated signal gACi from an input signal X. A error power evaluation unit computes an error power according to an error signal The above described processes are performed on all code vectors Ci and gains g. The index i of the code vector Ci and the gain g with which the error power is the smallest are computed and transmitted to the decoder.